

Amendments to the Claims:

This Listing of Claims replaces all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) An electric heating device having a substantially rod-shaped body and for applying heat from an end portion of the body to an outside material, the heating device comprising:
a tip for applying heat from the tip to the outside material
a heat generating member which is electrically energized to generate heat for heating the end portion of the body, the heat generating member including a heater core of high heat conductive material and a heating coil wound around the heater core, the heater core being coupled with the tip such that the tip and the core extend serially in the longitudinal direction of the body; and
a temperature sensor located close to the tip to detect the temperature at the tip, the temperature sensor being located distant from the heat generating member in the longitudinal direction of the body.
2. (Currently Amended) An electric heating device according to Claim 1, further comprising a sensor insulating pipe located within the body between the heating coil and the temperature sensor along the longitudinal direction of the electric heating device to make the heating coil and the temperature sensor distant from each other, and a sensor lead wire connected with the temperature sensor and extending through the sensor insulating pipe. wherein the temperature sensor is located in a forward portion of the body, the heat generating member includes a heater core of high heat conductive material, and a heating coil wound around the heater core, and heat is conducted through the heater core in the longitudinal direction of the body from the heat generating member to the end portion of the body.
3. (Currently Amended) An electric heating device according to Claim 1, further comprising a heater lead wire connected with the heat generating member and extending within

the body in the longitudinal direction of the body, and a sensor lead wire connected with the temperature sensor and extending within the body in the longitudinal direction of the body, each of the heater lead wire and the sensor lead wire having an exposed portion exposed to the outside of the body to be electrically connected with an outside terminal.

4. (Currently Amended) An electric heating device according to Claim 3, further comprising a wire supporting member formed with a wire receiving hole for receiving a free end portion of the heater lead wire or the sensor lead wire, and an opening which is open sideways for communicating the wire receiving hole with the outside of the body to expose the exposed portion to the outside.

5. (Original) An electric heating device according to Claim 4, wherein a surface of the exposed portion of the heater lead wire or the sensor lead wire is treated to reduce contact resistance.

6. (Original) An electric heating device according to Claim 4, wherein the exposed portion is nickel-plated.

7. (Currently Amended) An electric soldering iron comprising:
a substantially rod-shaped body including a tip for applying heat from the tip to an electric part;

a heat generating member which is electrically energized to generate heat for heating the tip, the heat generating member including a heater core of high heat conductive material and a heating coil wound around the heater core, the heater core being coupled to the tip such that the tip and the core extend serially in the longitudinal direction of the body; and

a temperature sensor located close to the tip to detect ~~for detecting~~ the temperature at the tip, the temperature sensor being located distant from the heat generating member in the longitudinal direction of the body.

8. Cancelled.

9. (Currently Amended) A handheld tweezer-type electric part handling device, comprising
a housing;
a fixed leg attached to the housing;
a movable leg attached to the housing and approximately located adjacent and parallel to
the fixed leg, the movable leg adapted to move relative to the fixed leg to hold an electric part
therebetween and wherein each leg includes an electric heating device as claimed in Claim 7;
and
a sleeve for receiving the electric heating device.
~~having a pair of legs, each leg having the structure of the electric heating device as claimed in~~
~~claim 1.~~
10. (Currently Amended) A handheld device according to Claim 9, wherein the body and the
tip extend end portion are in a substantially straight manner and an included angle of the legs is
between 10° and 14° when the legs are closed.
11. (Original) A handheld device according to claim 10, wherein the included angle is 12°.
12. (Currently Amended) An electric heating device having an elongated body with a first
end and a second end capable of generating heat near the first end, the electric heating device
comprising:
a heat generating member near the first end of the electric heating device capable of
converting electric energy to heat;
a temperature sensor located closer to the first end than the heat generating member
capable of detecting the temperature of the first end of the electric heating device; and
a lead wire ~~communicatably~~ communicably coupled to the temperature sensor for
transmitting the detected temperature to a control device; and

where a sensor insulating pipe for enclosing the lead wire along at least a portion of the lead wire is thereof and located between the temperature sensor and the heat generating member heating along the longitudinal direction of the electric heating device providing a predetermined distance between the temperature sensor and the heat generating member along the longitudinal direction.

13. (Previously Presented) An electric heating device according to Claim 12, where the temperature sensor is located in a forward portion of the body, the heat generating member includes a heater core of high heat conductive material, and a heating coil wound around the heater core, and heat is conducted through the heater core in the longitudinal direction of the body from the heat generating member to the first end of the body.

14. (Currently Amended) An electric heating device according to Claim 12, further comprising a heater lead wire connected with the heat generating member and extending within the body in the longitudinal direction of the body, and a sensor lead wire connected with the temperature sensor and extending within the body in the longitudinal direction of the body, each of the heater lead wire and the sensor lead wire having an exposed portion exposed to [[the]] outside of the body to be electrically connected with an outside terminal.

15. (Currently Amended) An electric heating device according to Claim 14, further comprising a wire supporting member formed with a wire receiving hole for receiving a free end portion of the heater lead wire or the sensor lead wire, and an opening for communicating the wire receiving hole with the outside of the body to expose the exposed portion to the outside.

16. (Previously Presented) An electric heating device according to Claim 15, where a surface of the exposed portion of the heater lead wire or the sensor lead wire is treated to reduce contact resistance.

17. (Previously Presented) An electric heating device according to Claim 15, where the exposed portion is nickel-plated.

18. (Currently Amended) An electric heating device having a first end and a second end and capable of generating heat near the first end, the electric heating device comprising:

a heat generating member for generating heat;

means for conducting the generated heat to the first end;

means for sensing temperature near the first end away from a heat generating member along the longitudinal axis of the electrical heating device; [[and]]

means for conducting power through the second end and transferring the power to the heat generating member;

means for transferring the sensed temperature to a control circuit; and

means for protecting said means for transferring between said heat generating member and said means for sensing temperature, said means for protecting adapted to make said means for sensing distant from the heat generating member.

19. Cancelled.

20. Cancelled.

Please add the following new claims:

21. (New) An electric heating device according to Claim 1, wherein the tip has a first end portion adapted to heat the outside material, a middle portion for accommodating the temperature sensor therein, and a second end portion to be coupled to the heater core wherein and the diameter of the middle portion is smaller than that of the second end portion.

22. (New) An electric soldering iron according to Claim 7, wherein the tip has a first end portion adapted to heat the outside material, a middle portion for accommodating the temperature sensor therein, and a second end portion to be coupled with the heater core and wherein the diameter of the middle portion is smaller than that of the second end portion.